

Enewold-Goldberg  
09/494332

09/494332

FILE 'REGISTRY' ENTERED AT 16:14:31 ON 21 NOV 2000

L1 2007 SEA ABB=ON PLU=ON GGGAGAGCCATAGGGTCTGCGGAA | CGGGGCACACTCG  
CAAGCACCCCTATCA | CTGCTTAAGCCTCAATAAGCTTGCCTG | GGGCTGAGGG  
ATCTCTAGTTACC | TGTTCGGGCGCCACTGCTAGAGA | GGGAGGTTCTCTCCAGCAC  
TAGCA | GCGACTAGGAGAGATGGGAACACACA | CGCCAGCGTGGACCATCAAGTAGT  
AA | CACGATCCTGGAGCAGACACTGAAGA | GGGAGAGCCATAGGGTCTGCGGAA/S  
QSN

L2 110 SEA ABB=ON PLU=ON CGGGGCACTCGCAAGCACCCTATC | CCTTCGCGACC  
CAACACTACTCGGCT | CAACAGACGGCACACACTACT | CCACGCTTGCTTGCCTAA  
AGACCTC | GAACAGATGGGCACACACTGCT/SQSN ← Seq. IDs 1-14 & 16

L3 41 SEA ABB=ON PLU=ON (L1 OR L2) AND SQL=<50 ← Seq. ID 15

L4 2 SEA ABB=ON PLU=ON CGCCAGCGTGGACCATCAAGTAGTAATGAACGCACGG  
ACGAGGACATCATAGAGATTACACCTT/SQSN ← Seq. ID 15

L5 43 SEA ABB=ON PLU=ON L3 OR L4

FILE 'CAPLUS' ENTERED AT 16:25:44 ON 21 NOV 2000

L6 23 SEA ABB=ON PLU=ON L5

L6 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 2000:665643 CAPLUS

DOCUMENT NUMBER: 133:248028

TITLE: Oligonucleotide primers for efficient reverse  
transcription of hepatitis C virus (HCV) RNA and  
methods of use thereof

INVENTOR(S): Linnen, Jeffrey M.; Gorman, Kevin M.

PATENT ASSIGNEE(S): Ortho-Clinical Diagnostics, Inc., USA

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1036847	A1	20000920	EP 2000-300791	20000201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 2000000537	A	20000804	NO 2000-537	20000202
CN 1270228	A	20001018	CN 2000-104179	20000203

PRIORITY APPLN. INFO.: US 1999-118520 19990203

AB Described herein are novel oligonucleotide primers for efficient  
reverse transcription of Hepatitis C Virus (HCV) RNA. Also provided  
are methods and kits for detecting HCV nucleic acid sequences in  
biol. samples.

IT 287214-94-2, 5: PN: EP1026241 SEQID: 5 unclaimed DNA

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

(PCR primer; oligonucleotide primers for efficient reverse

Searcher : Shears 308-4994

transcription of hepatitis C virus (HCV) RNA and methods of use  
thereof)

REFERENCE COUNT:

8

REFERENCE(S):

- (1) Bukh, J; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA 1992, V89, P187 CAPLUS
- (2) Government Of The United State; WO 9904008 A 1999
- (3) Japan Immuno Inc; EP 0633320 A 1995
- (4) Khorsi, H; RESEARCH IN VIROLOGY 1998, V149, P115 CAPLUS
- (7) Umlauft, F; JOURNAL OF CLINICAL MICROBIOLOGY 1996, V34, P2552 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 2000:645726 CAPLUS

DOCUMENT NUMBER: 133:233554

TITLE: Primers and method for multiplex detection of hepatitis C virus and HIV

INVENTOR(S): Gorman, Kevin M.; Patterson, David R.; Linnen, Jeffrey M.; Song, Keming

PATENT ASSIGNEE(S): Ortho-Clinical Diagnostics, Inc., USA

SOURCE: Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1035220	A2	20000913	EP 2000-300789	20000201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000279198	A2	20001010	JP 2000-30237	20000202
US 1999-118498 19990203				

PRIORITY APPLN. INFO.:

AB Disclosed herein are PCR primers, capture probes, methods, and kits for the simultaneous detection of hepatitis C virus and human immunodeficiency virus in biol. samples from human subjects.

IT 219125-48-1 219125-56-1 219125-60-7

219125-98-1 219126-09-7 287214-92-0, 1:

PN: EP1026241 SEQID: 1 unclaimed DNA 287214-93-1, 2: PN:

EP1026241 SEQID: 2 unclaimed DNA 287741-63-3

287741-67-7

RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)

(PCR primer; primers and method for multiplex detection of hepatitis C virus and HIV)

IT 292665-23-7

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RL: PRP (Properties)

(Unclaimed; primers and method for multiplex detection of hepatitis C virus and HIV)

IT 137368-24-2 219125-70-9 219125-77-6

287741-72-4

RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)

(capture probe; primers and method for multiplex detection of hepatitis C virus and HIV)

L6 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 2000:587043 CAPLUS

DOCUMENT NUMBER: 133:187934

TITLE: Method for preventing HIV-1 infection of CD4+ cells

INVENTOR(S): Allaway, Graham P.; Litwin, Virginia M.; Maddon, Paul J.; Olson, William C.

PATENT ASSIGNEE(S): Progenics Pharmaceuticals, Inc., USA

SOURCE: U.S., 26 pp., Cont.-in-part of U.S. Ser. No. 831,823.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6107019	A	20000822	US 1997-876078	19970613
WO 9856421	A1	19981217	WO 1998-US12331	19980612
W: AU, CA, JP, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9881426	A1	19981230	AU 1998-81426	19980612
EP 1009435	A1	20000621	EP 1998-931261	19980612
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:				
US 1996-14532 19960402				
US 1996-19715 19960614				
US 1997-831823 19970402				
US 1997-876078 19970613				
WO 1998-US12331 19980612				

AB This invention provides methods for inhibiting fusion of HIV-1 to CD4+ cells which comprise contacting CD4+ cells with a non-chemokine agent capable of binding to a chemokine receptor in an amt. and under conditions such that fusion of HIV-1 to the CD4+ cells is inhibited. This invention also provides methods for inhibiting HIV-1 infection of CD4+ cells which comprise contacting CD4+ cells with a non-chemokine agent capable of binding to a chemokine

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receptor in an amt. and under conditions such that fusion of HIV-1 to the CD4+ cells is inhibited, thereby inhibiting the HIV-1 infection. This invention provides non-chemokine agents capable of binding to the chemokine receptor and inhibiting fusion of HIV-1 to CD4+ cells. This invention also provides pharmaceutical compns. comprising an amt. of the non-chemokine agent capable of binding to the chemokine receptor and inhibiting fusion of HIV-1 to CD4+ cells effective to prevent fusion of HIV-1 to CD4+ cells and a pharmaceutically acceptable carrier.

IT 288879-50-5

RL: PRP (Properties)

(unclaimed nucleotide sequence; method for preventing HIV-1 infection of CD4+ cells)

REFERENCE COUNT: 24

REFERENCE(S):

- (1) Alkhatib; Science 1996, V272, P1955 CAPLUS
- (3) Bleul; Nature 1996, V382, P829 CAPLUS
- (4) Choe; Cell 1996, V85, P1135 CAPLUS
- (5) Cocchi; Science 1995, V270, P1811 CAPLUS
- (6) Deng; Nature 1996, V381, P661 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 2000:553289 CAPLUS

DOCUMENT NUMBER: 133:160527

TITLE: Oligonucleotide reverse transcription primers for efficient detection of HIV-1 and HIV-2 infection by RT-PCR

INVENTOR(S): Patterson, David R.; Puskas, John A.; Song, Keming; Linnen, Jeffrey M.

PATENT ASSIGNEE(S): Ortho-Clinical Diagnostics, Inc., USA

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1026263	A2	20000809	EP 2000-300792	20000201
EP 1026263	A3	20001011		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 2000000513	A	20000803	NO 2000-513	20000201
US 1999-118417 19990202				

PRIORITY APPLN. INFO.:

AB Disclosed herein are methods and kits for the detection of human immunodeficiency virus in biol. samples from human subjects. Oligonucleotide reverse transcription primers for use in such methods and kits for detection of human immunodeficiency virus are

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also described.

IT 137368-24-2 219125-48-1 219125-60-7  
 219125-70-9 219125-77-6 219125-98-1  
 219126-09-7 287214-94-2, 5: PN: EP1026241 SEQID: 5  
 unclaimed DNA 287742-47-6  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; oligonucleotide reverse  
 transcription primers for efficient detection of HIV-1 and HIV-2  
 infection by RT-PCR)

L6 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 2000:553288 CAPLUS  
 DOCUMENT NUMBER: 133:160526  
 TITLE: Oligonucleotide primers for efficient detection  
 of hepatitis C virus (HCV) infection by RT-PCR  
 INVENTOR(S): Linnen, Jeffrey M.; Gorman, Kevin M.  
 PATENT ASSIGNEE(S): Ortho-Clinical Diagnostics, Inc., USA  
 SOURCE: Eur. Pat. Appl., 28 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1026262	A2	20000809	EP 2000-300763	20000201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 2000000536	A	20000804	NO 2000-536	20000202
JP 2000279200	A2	20001010	JP 2000-32656	20000203
US 1999-118497 19990203				

PRIORITY APPLN. INFO.:  
 AB Described herein are methods and kits for the detection of hepatitis  
 C virus RNA in biol. samples obtained from human subjects. The  
 invention includes novel amplification primers and probes useful in  
 the amplification of DNA derived from hepatitis C virus RNA, and  
 kits and methods which incorporate the novel primers. The method is  
 compared with other com. HCV detection assay and tested with  
 patient's samples having different HCV genotype for the sensitivity  
 and specificity.

IT 287741-63-3 287741-67-7 287741-72-4  
 RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical  
 study); USES (Uses)  
 (nucleotide sequence; oligonucleotide primers for efficient  
 detection of hepatitis C virus (HCV) infection by RT-PCR)  
 IT 287214-94-2, 5: PN: EP1026241 SEQID: 5 unclaimed DNA  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; oligonucleotide primers for  
 efficient detection of hepatitis C virus (HCV) infection by  
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RT-PCR)

L6 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 2000:553287 CAPLUS  
 DOCUMENT NUMBER: 133:160525  
 TITLE: Enhancement of the specificity of nucleic acid amplification by adding carrier nucleic acids  
 INVENTOR(S): Preston, Gregory M.; Backus, John W.  
 PATENT ASSIGNEE(S): Ortho-Clinical Diagnostics, Inc., USA  
 SOURCE: Eur. Pat. Appl., 12 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1026261	A2	20000809	EP 2000-300790	20000201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 2000000538	A	20000804	NO 2000-538	20000202
JP 2000279184	A2	20001010	JP 2000-32660	20000203
US 1999-118495 19990203				

## PRIORITY APPLN. INFO.:

AB Disclosed herein are improved methods for amplifying nucleic acids. The invention is based on the finding that adding carrier DNA to a nucleic acid amplification mixt. considerably increases the efficiency of amplification of the target nucleic acid. Specifically, the method of the invention results in a redn. in polymerase extension of non-target nucleic acids during amplification assays through a redn. in the amt. of primer-dimer formation prior to raising the temp. of the amplification mixt. during thermal cycling. The methods encompass a method for increasing the specificity of amplification of a target nucleic acid in an amplification reaction, where the reaction reagents include one or more oligonucleotide amplification primers specific to the target nucleic acid, a target nucleic acid, a nucleic acid polymerase, and one or more magnesium salts, by prep. a primer/carrier mixt. comprising one or more oligonucleotide amplification primers and carrier nucleic acid, and contacting the primer/carrier admixt. with target nucleic acid, one or more magnesium salts, and nucleic acid polymerase.

IT 219125-48-1 219125-56-1 219125-60-7  
 219125-98-1 219126-09-7 287214-92-0, 1:  
 PN: EP1026241 SEQID: 1 unclaimed DNA 287214-93-1, 2: PN:  
 EP1026241 SEQID: 2 unclaimed DNA 287214-94-2, 5: PN:  
 EP1026241 SEQID: 5 unclaimed DNA  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; enhancement of the specificity of nucleic acid amplification by adding carrier nucleic acids)

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L6 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 2000:553278 CAPLUS  
 DOCUMENT NUMBER: 133:145891  
 TITLE: An improved method for preparing DNA from serum  
 and plasma for detection bacteria and virus  
 INVENTOR(S): Bergmeyer, Lynn; Angie, Kerry Lee  
 PATENT ASSIGNEE(S): Ortho-Clinical Diagnostics, Inc., USA  
 SOURCE: Eur. Pat. Appl., 17 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1026241	A1	20000809	EP 2000-300762	20000201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 2000000539	A	20000804	NO 2000-539	20000202
JP 2000279199	A2	20001010	JP 2000-32644	20000203
US 1999-118496 19990203				

PRIORITY APPLN. INFO.:  
 AB Deascribed are methods for extg. DNA from serum or plasma,  
 comprising contacting serum or plasma with alkali to yield  
 alkalinized serum or plasma, heating the alkalinized serum or plasma  
 to a temp. ranging from about 100 to 110°C for a time ranging from  
 about 5 to 20 min, centrifuging the heated alkalinized serum or  
 plasma to yield DNA-contg. supernatant, allowing the heated  
 alkalinized serum or plasma to cool to room temp., or about 25°C,  
 and recovering the DNA-contg. supernatant. Also disclosed are  
 methods for detecting a DNA-contg. microorganism in serum or plasma.

IT 287214-92-0 287214-93-1 287214-94-2

RL: PRP (Properties)  
 (unclaimed nucleotide sequence; improved method for prep. DNA  
 from serum and plasma for detection bacteria and virus)

REFERENCE COUNT: 2  
 REFERENCE(S):  
 (1) Hansen, K; J INFECT DIS 1994, V170(6), P1271  
 (2) Penn State Res Found; WO 9734015 A 1997

L6 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1999:253560 CAPLUS  
 DOCUMENT NUMBER: 130:333705  
 TITLE: Oligonucleotide primers and probes for real-time  
 detection of hepatitis C virus by PCR  
 INVENTOR(S): Ohara, Michinori; Kawaguchi, Ryuji; Abe, Aki  
 PATENT ASSIGNEE(S): Tokyoto Rinsho Igaku Sogo Kenkyusho, Japan; SRL  
 K. K.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 Searcher : Shears 308-4994

09/494332

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11103899	A2	19990420	JP 1997-283042	19970930

AB Provided are oligonucleotide primers and probes for real-time detection of hepatitis B virus. Furthermore, the probes are optionally conjugated with a fluorescent reporter and quencher dye to enhance the anal.

IT 224306-22-3P ✓

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(oligonucleotide primers and probes for real-time detection of hepatitis C virus by PCR)

L6 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1999:34811 CAPLUS

DOCUMENT NUMBER: 130:91259

TITLE: Amplification and detection of HIV-1 and/or HIV-2 nucleic acids

INVENTOR(S): Backus, John Wesley; Atwood, Susan Melissa; Casey, Ann Elizabeth; Rasmussen, Eric Brice; Cummins, Thomas Joseph

PATENT ASSIGNEE(S): Ortho-Clinical Diagnostics, Inc., USA

SOURCE: Eur. Pat. Appl., 25 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 887427	A2	19981230	EP 1998-304959	19980624
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6001558	A	19991214	US 1998-102830	19980623
JP 11069987	A2	19990316	JP 1998-177059	19980624
US 1997-50759 19970625				

PRIORITY APPLN. INFO.:

AB The present invention relates to methods and test kits for the amplification and detection of nucleic acids from human immunodeficiency virus (HIV) type 1 and/or type 2. The methods use multiple primer sets to amplify all subtypes of HIV-1, including

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group M and group O isolates, and all subtypes of HIV-2. The primer sets for HIV-1 and HIV-2 are compatible with each other and can, therefore, be combined to form a complex co-amplification assay that can detect all sequenced isolates of HIV-1 and HIV-2. This amplification and detection can be carried out in a multiplexed fashion and in the presence of an internal pos. control that signals false neg. results due to problems in sample prep., amplification and/or detection.

IT 219125-48-1 219125-56-1 219125-60-7  
 219125-70-9 219125-77-6  
 RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)  
 (PCR primer for HIV-1 LTR; amplification and detection of HIV-1 and/or HIV-2 nucleic acids)

IT 137368-24-2 219125-98-1 219126-09-7  
 RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)  
 (PCR primer for HIV-2 LTR; amplification and detection of HIV-1 and/or HIV-2 nucleic acids)

L6 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1998:613519 CAPLUS  
 DOCUMENT NUMBER: 129:299005  
 TITLE: Real-time detection of hepatitis C virus by a PCR-based method and primer and probes for the method  
 INVENTOR(S): Ohara, Michinori; Inoue, Kazuaki; Katsume, Asao; Takeuchi, Tomoko; Kawaguchi, Tatsuji  
 PATENT ASSIGNEE(S): Tokyoto Rinsho Igaku Sogo Kenkyusho, Japan; SRL K. K.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 10248579	A2	19980922	JP 1997-67321	19970305
AB	Two sets of forward and reverse primers and 2 probes for the real-time detection of hepatitis C virus (HCV) by PCR followed fluorescence anal. are provided. The probes can be labeled with a reporter fluorescence dye (e.g. fluorescein) and a quencher fluorescence dye (e.g. rhodamine).				
IT	214136-59-1P				
	RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)				

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(reverse oligonucleotide primer derived from; real-time detection of hepatitis C virus by a PCR-based method and primer and probes for method)

L6 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1997:124382 CAPLUS  
 DOCUMENT NUMBER: 126:126887  
 TITLE: Hepatitis C virus-complementary oligonucleotides and analogs and their use in prophylaxis, treatment and diagnosis of viral infection  
 INVENTOR(S): Frank, Bruce L.; Goodchild, John; Hamlin, Henry A., Jr.; Kilkuskie, Robert E.; Roberts, Noel A.; Roberts, Peter C.; Walther, Debra M.; Wolfe, Jia L.  
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.; Hybridon Inc.  
 SOURCE: PCT Int. Appl., 99 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9639500	A2	19961212	WO 1996-EP2427	19960604
WO 9639500	A3	19970313		
W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
ZA 9604446	A	19961206	ZA 1996-4446	19960530
CA 2226438	AA	19961212	CA 1996-2226438	19960604
AU 9662219	A1	19961224	AU 1996-62219	19960604
EP 833902	A2	19980408	EP 1996-920788	19960604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1995-471968	19950606
			WO 1996-EP2427	19960604

AB The present invention discloses synthetic oligonucleotides and oligonucleotide analogs complementary to contiguous and non-contiguous regions of the hepatitis C virus (HCV) RNA. Also disclosed are methods and kits for inhibiting the replication of HCV, inhibiting the expression of HCV nucleic acid and protein, and for treating HCV infections. Numerous oligodeoxyribonucleotides, hybrid oligodeoxy- and deoxyribonucleotides, and analogs of these oligonucleotides contg. modified linkages, modified bases, modified sugar residues, etc. were prep'd. These oligonucleotides were tested

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in RNase H cleavage assays as well as in inhibition of HCV luciferase fusion protein expression in stably transfected cells, inhibition of HCV RNA expression in stably transfected cells, and inhibition of HCV protein expression in Semliki Forest virus/HCV recombinant virus infected cells. Sequence-specific inhibition was obsd.

IT 186102-76-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(hepatitis C virus-complementary oligonucleotides and analogs and their use in prophylaxis, treatment and diagnosis of viral infection)

L6 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1996:96445 CAPLUS  
DOCUMENT NUMBER: 124:195098  
TITLE: Comparison of two quantitative hepatitis C virus reverse transcriptase PCR assays  
AUTHOR(S): Roth, W. Kurt; Lee, Jung-Hun; Ruester, Brigitte; Zeuzem, Stefan  
CORPORATE SOURCE: Chemotherapeutisches Forschungsinstitut Georg-Speyer-haus, Frankfort/Main, 60596, Germany  
SOURCE: J. Clin. Microbiol. (1996), 34(2), 261-4  
CODEN: JCMIDW; ISSN: 0095-1137  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A quant. hepatitis C virus reverse transcriptase PCR (HCV RT-PCR) assay established in our lab. was compared with the Roche Amplicor HCV Monitor test kit for agreement of test results and intra-assay variability. Both assays rely on reverse transcription and amplification of extd. RNA from patients' sera together with an internal RNA std. derived from the 5'-noncoding region of HCV. A panel of clin. serum samples (n = 33) was quant. analyzed in parallel by both test systems. The methods demonstrated substantial agreement between 1 .times. 103 and 5 .times. 105 HCV RNA mols. per mL of serum. However, with sera contg. more than 5 .times. 105 copies per mL, according to our inhouse assay, the results diverged on av. in a nonacceptable range of 2 orders of magnitude. Our inhouse HCV RT-PCR assay measured up to 5 .times. 107 HCV-RNA mols. per mL in some serum samples. However, the Roche Amplicor HCV Monitor test kit did not detect more than 2 .times. 106 mols. in any of the serum samples tested. After diln. of serum samples prior to testing, an approx. 0.5 order of magnitude more HCV RNA mols. was detected by the Roche HCV test kit in sera contg. high copy nos. (>5 .times. 105 RNA copies according to the inhouse assay). The inhouse PCR and the Roche Amplicor HCV Monitor test kit revealed coeffs. of variation of 6.2 and 7.5%, resp.

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IT 141442-95-7

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study);  
 BIOL (Biological study); USES (Uses)  
 (primer; comparison of two quant. hepatitis C virus reverse  
 transcriptase PCR assays)

L6 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1995:846626 CAPLUS  
 DOCUMENT NUMBER: 124:2516  
 TITLE: Solution phase nucleic acid sandwich assays  
 having reduced background noise  
 INVENTOR(S): Urdea, Michael S.; Fultz, Timothy; Warner, Brian  
 D.; Collins, Mark  
 PATENT ASSIGNEE(S): Chiron Corp., USA  
 SOURCE: PCT Int. Appl., 85 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9516055	A1	19950615	WO 1994-US14119	19941207
W: AU, CA, HU, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5681697	A	19971028	US 1993-164388	19931208
CA 2178598	AA	19950615	CA 1994-2178598	19941207
AU 9513038	A1	19950627	AU 1995-13038	19941207
AU 694468	B2	19980723		
EP 731848	A1	19960918	EP 1995-904290	19941207
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
HU 74225	A2	19961128	HU 1996-1593	19941207
JP 09507024	T2	19970715	JP 1994-516343	19941207
US 5635352	A	19970603	US 1995-429181	19950426
US 1993-164388 19931208				
WO 1994-US14119 19941207				

PRIORITY APPLN. INFO.:

AB New techniques are provided for substantially reducing background signals encountered in soln. phase hybridization assays. The techniques are premised on eliminating or significantly reducing the phenomena of nonspecific hybridization and nonspecific binding, so as to provide a detectable signal which is produced only in the presence of the target polynucleotide of interest. Amplification multimers enable the binding of significant more label in the analyte-probe complex, enhancing assay sensitivity and specificity. Two or more distinct "capture extender" mols. are used, each of which must bind the the analyte in order for the assay to result in

Searcher : Shears 308-4994

a detectable signal, as well as binding to support-bound "capture probes". The melt temp.  $T_m1$  of the multicomponent complex formed between the analyte and support-bound capture probes, mediated by  $\geq 2$  distinct capture extender mols., is significantly higher than the melt temp  $T_m2$  of each 2-component complex formed between a capture probe and an individual capture extender mol. Thus, the assay is carried out at conditions which favor formation of hybrid complexes in which analyte mol. is bound to the capture probes; the preferred method includes running one or more steps of the assay at a temp. between  $T_m1$  and  $T_m2$ . "Label extenders" (bridging probes which bind to the analyte as well as to label probes) and amplification multimers can also be included in the assays. Oligonucleotide competitors can be incorporated into the assay so as to bind to the capture probes (thus reducing the likelihood of nonspecific hybridization on the solid support), and shorter capture probes can be used for the same purpose. In certain embodiments, methods are provided for increasing the signal which can otherwise be diminished in noise redn. Kits for carrying out the novel assays are provided as well. Examples are presented for hepatitis C virus assay comprising (1) an amplification assay using different capture extenders in a cruciform format, (2) an amplification assay using multiple label extenders in a cruciform format, (3) multidentate capture, (4) hybridization assay using two amplifiers, and (5) a hybridization assay combining the concepts.

IT 168814-33-3

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (capture extender probe; soln. phase nucleic acid sandwich assays having reduced background noise)

L6 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1995:646084 CAPLUS

DOCUMENT NUMBER: 123:219406

TITLE: Detection and analysis of hepatitis C virus by a combined RT-PCR method: variation in the 5' non-coding region of the viral genome

AUTHOR(S): Karachristos, A.; Linardopoulos, S.; Ergazaki, M.; Spandidos, D. A.

CORPORATE SOURCE: Medical School, University of Crete, Heraklion, Greece

SOURCE: J. Med. Microbiol. (1995), 42(5), 367-71  
 CODEN: JMMIAV; ISSN: 0022-2615

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A combined reverse transcription-polymerase chain reaction (RT-PCR) method was employed for the detection of hepatitis C virus (HCV) RNA in serum from patients with chronic active hepatitis, with primers corresponding to the 5' non-coding region. The diagnosis was based on serol. and biochem. methods and on liver biopsy. HCV-RNA was

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detected in 27 (90%) of 30 sera examd. The nucleotide sequence of PCR-amplified HCV cDNAs (256 bp) was detd. from five specimens and heterogeneity varying between 0.58% and 2.89% among the clin. samples and the prototype HCV-1 was found.

IT 141442-95-7

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(nucleotide sequence; detection of hepatitis C virus by a combined RT-PCR method and anal. of variation in 5' non-coding region of viral genome)

L6 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1995:338920 CAPLUS

DOCUMENT NUMBER: 122:231999

TITLE: Quantification of hepatitis C virus RNA by competitive reverse transcription and polymerase chain reaction using a modified hepatitis C virus RNA transcript

AUTHOR(S): Ruester, Brigitte; Zeuzem, Stefan; Roth, W. Kurt

CORPORATE SOURCE: Chemotherapeutisches Forschungsinstitut Georg-Speyer-Haus, Frankfurt/Main, 60596, Germany

SOURCE: Anal. Biochem. (1995), 224(2), 597-600  
CODEN: ANBCA2; ISSN: 0003-2697

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The title method was described and evaluated. The amplification product of the std. has the same length as the amplification product of the 5'-noncoding region of hepatitis C virus. The modification of the std. consists of an exchanged 25-base segment which was generated by site-directed mutagenesis by overlap-extension using PCR. This approach permits competitive RT-PCR conditions using the same primers without preference of wild-type RNA or RNA std. Detection of the coamplified mutant std. and the wild-type hepatitis C virus amplification product is performed after denaturation and subsequent hybridization with sequence-specific biotinylated oligonucleotides.

IT 141442-95-7

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(PCR primer Bantisense; quantification of hepatitis C virus RNA by competitive reverse transcription and PCR using a modified hepatitis C virus RNA transcript)

L6 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1995:220424 CAPLUS

DOCUMENT NUMBER: 122:2776

TITLE: Probes and primers for detection of human  
Searcher : Shears 308-4994

09/494332

immunodeficiency virus type 1 in biological  
samples

INVENTOR(S): McDonough, Sherrol H.; Ryder, Thomas B.; Yang,  
Yeasing

PATENT ASSIGNEE(S): Gen-Probe Incorp., USA

SOURCE: Eur. Pat. Appl., 69 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 617132	A2	19940928	EP 1994-302196	19940328
EP 617132	A3	19951129		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
CA 2159103	AA	19941013	CA 1994-2159103	19940322
WO 9423069	A1	19941013	WO 1994-US3130	19940322
W: AU, CA, JP, KR				
AU 9465515	A1	19941024	AU 1994-65515	19940322
AU 686616	B2	19980212		
JP 08508404	T2	19960910	JP 1994-522164	19940322
US 1993-40745 19930326				
WO 1994-US3130 19940322				

PRIORITY APPLN. INFO.:

AB Amplification primers and hybridization assay probes that can be used to distinguish human immunodeficiency virus type 1 from other viruses found in human blood are described.

IT 159609-96-8 159610-29-4D, 5' terminal modified  
analogs

RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(nucleotide sequence; probes and primers for detection of human immunodeficiency virus type 1 in biol. samples)

L6 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1994:572241 CAPLUS

DOCUMENT NUMBER: 121:172241

TITLE: Controlling translation of hepatitis C virus  
RNAs with antisense oligonucleotides

INVENTOR(S): Hang, Jan H.; Spaete, Richard R.; Yoo, Byoung  
J.; Suh, Byung S.; Selby, Mark J.; Houghton,  
Michael

PATENT ASSIGNEE(S): Chiron Corp., USA

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

Searcher : Shears 308-4994

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9408002	A2	19940414	WO 1993-US9200	19930928
WO 9408002	A3	19940526		
			W: AU, BG, CA, CZ, FI, HU, JP, KR, NO, PL, RO, RU, SK, UA RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE	
EP 662128	A1	19950712	EP 1993-922414	19930928
			R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE	
JP 08502167	T2	19960312	JP 1993-509245	19930928
EP 718400	A2	19960626	EP 1995-118443	19930928
EP 718400	A3	19960703		
			R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE	
US 5922857	A	19990713	US 1995-440209	19950512
US 6057093	A	20000502	US 1995-439996	19950512
			US 1992-952799	19920928
			EP 1993-922414	19930928
			US 1993-128583	19930928
			WO 1993-US9200	19930928

## PRIORITY APPLN. INFO.:

AB The use of antisense oligonucleotides to viral RNAs to prevent gene expression is described. In particular, the translation of hepatitis C virus is controlled using antisense oligonucleotides to control elements of the 5'-untranslated region of the viral genome. These antisense oligonucleotides are therefore interacting with cis-acting elements of the viral RNA. Cis-acting elements in the 5'-untranslated region of the viral RNA were identified by deletion anal. using a CAT reporter gene to measure function in cell lysates. A hairpin loop and a downstream cis-acting element similar to pestivirus homol. box IV were identified; the sequence did not function as an internal ribosome entry site. Phosphorothioate antisense oligonucleotides to the terminal hairpin and the internal site were prep'd. When conjugated with cholesterol these oligonucleotides were able to inhibit translation of an RNA carrying the hepatitis C virus 5'-UTR, but not that of SV40.

IT 157607-26-6  
RL: USES (Uses)  
(antisense oligonucleotide to 5'-untranslated region of hepatitis C virus, for control of translation of viral RNA, cholesteryl conjugates in relation to)

L6 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1994:70883 CAPLUS  
DOCUMENT NUMBER: 120:70883  
TITLE: Process for immobilizing nucleic acid probes on polystyrene surfaces  
Searcher : Shears 308-4994

INVENTOR(S) : Sheridan, Patrick; Chang, Chu An; Running, Joyce  
 PATENT ASSIGNEE(S) : Chiron Corp., USA  
 SOURCE: PCT Int. Appl., 38 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9313224	A1	19930708	WO 1992-US11343	19921222
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5747244	A	19980505	US 1991-813338	19911223
AU 9334276	A1	19930728	AU 1993-34276	19921222
EP 620864	A1	19941026	EP 1993-902855	19921222
EP 620864	B1	20000329		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 191237	E	20000415	AT 1993-902855	19921222
US 5712383	A	19980127	US 1995-438639	19950510
PRIORITY APPLN. INFO.:			US 1991-813338	19911223
			WO 1992-US11343	19921222

AB The title process comprises (a) treatment of polystyrene sequentially with strong acid (e.g. HCl), strong base (e.g. alkali metal hydroxide), and water; (b) adsorption of a polymer (e.g. polypeptide) onto the cleansed polystyrene surface; and (c) immobilization of the nucleic acid probe through covalent binding via a base-stable linkage. Thus, polystyrene microtiter plates were treated with HCl and NaOH and coated with poly(Phe-Lys). An oligonucleotide with a 5' N4-(6-aminocaproyl-2-aminoethyl) deriv. of cytidine was activated with disuccinimidyl suberate and then coupled to the polypeptide-coated plates. A comb-type oligonucleotide multimer having 15 branch sites and sidechain extensions with 3 labeled oligonucleotide binding sites was also prepd. The probe-immobilized plate and multimer together with amplifier probes (contg. oligonucleotides with a region complementary to the target sequence and a region complementary to a segment of the multimer) and capture probes (contg. oligonucleotides with a region complementary to the target and a region complementary to the immobilized probe) were used in a soln. phase nucleic acid hybridization assay for detecting hepatitis C virus E1 gene (RNA) and hepatitis B virus DNA.

IT 150363-07-8

RL: USES (Uses)  
 (hybridization probe for detection of hepatitis C virus gene  
 contg.)

Searcher : Shears 308-4994

L6 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1993:140789 CAPLUS  
DOCUMENT NUMBER: 118:140789  
TITLE: Detection of hepatitis C virus by polymerase chain reaction and response to interferon-.alpha. therapy: relationship to genotypes of hepatitis C virus  
AUTHOR(S): Yoshioka, Kentaro; Kakumu, Shinichi; Wakita, Takaji; Ishikawa, Tetsuya; Itoh, Yuji; Takayanagi, Masahiro; Higashi, Yasuyuki; Shibata, Motohiro; Morishima, Tsuneo  
CORPORATE SOURCE: Sch. Med., Nagoya Univ., Nagoya, 466, Japan  
SOURCE: Hepatology (St. Louis) (1992), 16(2), 293-9  
CODEN: HPTLD9; ISSN: 0270-9139  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB To investigate the relationship between genotypes of hepatitis C virus and response to interferon-.alpha. therapy, hepatitis C virus RNA was assayed by the polymerase chain reaction (PCR) with three sets of primers and probes in 70 patients with non-A, non-B chronic hepatitis who received interferon-.alpha.. Twenty-four patients sustained long-term remissions (complete responders). The PCR for the 5'-terminal noncoding region detected hepatitis C virus RNA in 94.3% (66 of 70) of the patients. The PCR for the nonstructural region 3, in which primers and a probe were synthesized to be identical to hepatitis C virus-J, detected hepatitis C virus RNA in 40 patients. The PCR for the nonstructural region 5, in which sequences of primers and a probe were derived from hepatitis C virus-K2, a genotype different from hepatitis C virus-J, detected hepatitis C virus RNA in 17 patients. Only one patient was pos. in both nonstructural region 3 and nonstructural region 5 PCRs. The nucleotide sequence of clones obtained from the 5' terminal noncoding region PCR products of two patients pos. in the PCR for nonstructural region 3 and neg. in the PCR for nonstructural region 5 (group 1) corresponded to that of the hepatitis C virus-J group, and those of clones from two patients neg. in the PCR for nonstructural region 3 and pos. in the PCR for nonstructural region 5 (group 2) corresponded to that of hepatitis C virus-K2. A clone from a patient neg. in the PCR for nonstructural region 3 and in the PCR for nonstructural region 5 (group 3) showed low nucleotide sequence homol. with the hepatitis C virus-J and hepatitis C virus-K2 groups. The complete response rates of group 2 (10 of 16 [62.5%]) and group 3 (6 of 10 [60.0%]) were significantly higher than that of group 1 (5 of 39 [12.8%]). Logarithms of hepatitis C virus RNA concns. (copies per mL) were significantly higher in group 1 (5.0) than in group 2 (3.8) or group 3 (3.2). These results indicate that detection of hepatitis C virus RNA by PCRs with different sets of primers and probes may be valuable in classifying

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hepatitis C virus into genotypes, and that the amt. of hepatitis C virus RNA in sera and response to interferon-.alpha. may vary among different genotypes of HCV.

IT 146484-41-5

RL: USES (Uses)

(hybridization probe, for hepatitis C virus detection, interferon .alpha. response in relation to)

L6 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1992:229085 CAPLUS

DOCUMENT NUMBER: 116:229085

TITLE: Importance of primer selection for the detection of hepatitis C virus RNA with the polymerase chain reaction assay

AUTHOR(S): Bukh, Jens; Purcell, Robert H.; Miller, Roger H.

CORPORATE SOURCE: Lab. Infect. Dis., Natl. Inst. Allergy Infect. Dis., Bethesda, MD, 20892, USA

SOURCE: Proc. Natl. Acad. Sci. U. S. A. (1992), 89(1), 187-91

CODEN: PNASA6; ISSN: 0027-8424

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Four primer sets from conserved regions of the hepatitis C virus (HCV) genome were compared for their ability to detect HCV RNA in a nested cDNA polymerase chain reaction assay on sera from 114 anti-HCV antibody-pos. individuals from around the world. The different primer sets had equiv. sensitivity, detecting <1 chimpanzee ID50 (dose that infects 50%) when tested against ref. strain H of HCV. Equal amts. of RNA extd. from the serum of each individual were tested with the 4 primer sets. The set derived from 2 highly conserved domains within the 5' noncoding (NC) region of the HCV genome, which also share significant similarity with Pestivirus 5' NC sequences, was the most effective at detecting HCV RNA. All samples pos. for HCV RNA with any other primer set were also pos. with the primer set from the 5' NC region, and the latter was at least 3 times more likely to detect HCV infection than a primer set from within the nonstructural protein 3-like gene region. No false pos. results were obtained in >500 neg. controls interspersed among the test samples. The 5' NC region primer set detected HCV-specific RNA, verified by high-stringency Southern blot hybridization and DNA sequencing, in 100% of 15 acute and 33 chronic non-A, non-B hepatitis patients from the United States, Europe, and Asia, and 10 hepatocellular carcinoma patients from Africa and Asia that tested neg. for the hepatitis B virus-encoded surface antigen. In conclusion, use of an appropriate primer set is crucial for detecting HCV RNA in the serum of infected individuals.

IT 141442-95-7

RL: USES (Uses)

(for detection of hepatitis C virus by PCR)

Searcher : Shears 308-4994

L6 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1991:675250 CAPLUS  
 DOCUMENT NUMBER: 115:275250  
 TITLE: Heat treatment in method for detecting a specific nucleic acid sequence in a cell sample, such as from blood  
 INVENTOR(S): Frostell, Asa; Nunn, Michael F.  
 PATENT ASSIGNEE(S): Pharmacia Genetic Engineering, Inc., USA  
 SOURCE: PCT Int. Appl., 71 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9108308	A1	19910613	WO 1990-US6953	19901129
W: JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 504278	A1	19920923	EP 1991-901361	19901129
EP 504278	B1	19970115		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 05504475	T2	19930715	JP 1991-501746	19901129
AT 147792	E	19970215	AT 1991-901361	19901129
PRIORITY APPLN. INFO.:			US 1989-443910	19891130
			US 1990-505833	19900406
			US 1990-548027	19900705
			WO 1990-US6953	19901129

AB In detecting a specific nucleic acid sequence contained in a blood sample, cells contg. the genomic DNA are isolated and placed in an aq. medium of <80 mg extracellular protein/mL and subjected to .gtoreq. 105.degree. for .gtoreq. 5 min. The method can be combined with a polymerase chain reaction (PCR) method to provide a simple and rapid procedure for detecting the nucleic acid sequence. Typically, the heat treatment is accomplished by autoclaving the isolated cells for a temp. and time sufficient to sterilize the sample. In preferred embodiments, the heat treatment is performed in the presence of nucleic acid primers, so that the released nucleic acid, which is denatured into single stands during the heat treatment, will hybridize to the primers on cooling. Also described is the synthesis of an amino-modified deoxycytidine phosphoramidite for use in prepn. of biotinylated and Eu-chelate-labeled oligonucleotides for use in assays for retrovirus detection. Thus cell line COS-10-11.1 was produced for human immunodeficiency virus (HIV)-pos. control cells; the cell line contained a single intact copy of an HIV-1 genome contg. a mutation rendering virus replication-incompetent. When the cells were subjected to the DNA

Searcher : Shears 308-4994

isolation method of the invention followed by PCR and detection with hybridization probes, the assay system was sensitive enough to detect HIV in as few as 5 cells from a background of 1,000,000. The assay was approx. linear in the range 5-40 COS-10-11.1 cells per million of background cells. Detection of HIV-1 in clin. lymphocyte samples is described, as is detection of HIV-2 and human T-cell lymphotropic virus-I and -II.

IT 137368-24-2

RL: ANST (Analytical study)  
(as oligonucleotide primer in human immunodeficiency virus-2 nucleic acid detection, heat treatment of blood cell sample for nucleic acid isolation in relation to)

L6 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1989:188624 CAPLUS

DOCUMENT NUMBER: 110:188624

TITLE: Mixed human immunodeficiency virus (HIV)  
infection in an individual: demonstration of  
both HIV type 1 and type 2 proviral sequences by  
using polymerase chain reaction

AUTHOR(S): Rayfield, Mark; De Cock, Kevin; Heyward,  
William; Goldstein, Lynn; Krebs, John; Kwok,  
Shirley; Lee, Stephanie; McCormick, Joseph;  
Moreau, J. M.; et al.

CORPORATE SOURCE: Cent. Infect. Dis., Cent. Dis. Control, Atlanta,  
GA, 30333, USA

SOURCE: J. Infect. Dis. (1988), 158(6), 1170-6  
CODEN: JIDIAQ; ISSN: 0022-1899

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Sera from persons to both human immunodeficiency virus type 1 (HIV-1) and type 2 (HIV-2), by whole virus (VEIA) enzyme immunoassays (EIAs) for each virus, were selected from a seroprevalence study of 944 persons in Abidjan, Cote d'Ivoire, West Africa, in 1987. These sera were subsequently tested for HIV-1 and HIV-2 antibody specificity by type-specific peptide EIAs (PEIA) and western blot (WB) anal. for both viruses. Peripheral blood monocytes (PBMCs) from representative individuals were cultured in the presence of phytohemagglutinin-stimulated normal donor PBMCs. These cultures were periodically monitored for HIV-1 and HIV-2 proviral sequences by using the selective DNA amplification technique polymerase chain reaction (PCR). As an outgrowth of this study, the case is reported of a person dually reactive by various serol. techniques in whom proviral sequences from HIV-1 and HIV-2 were detected by PCR. This is the 1st confirmed case of a mixed HIV-1 and HIV-2 infection in a single individual.

IT 120365-59-5

RL: ANST (Analytical study)  
(in mixed human immunodeficiency virus type 1 and type 2  
Searcher : Shears 308-4994

infection detection, by DNA amplification by polymerase chain reaction)

L6 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1988:127813 CAPLUS  
 DOCUMENT NUMBER: 108:127813  
 TITLE: DNA amplification for direct detection of HIV-1  
 in DNA of peripheral blood mononuclear cells  
 AUTHOR(S): Ou, Chin Yih; Kwok, Shirley; Mitchell, Sheila  
 W.; Mack, David H.; Sninsky, John J.; Krebs,  
 John W.; Feorino, Paul; Warfield, Donna;  
 Schochetman, Gerald  
 CORPORATE SOURCE: Cent. Infect. Dis., U. S. Dep. Health Hum.  
 Serv., Atlanta, GA, 30333, USA  
 SOURCE: Science (Washington, D. C., 1883-) (1988),  
 239(4837), 295-7  
 CODEN: SCIEAS; ISSN: 0036-8075  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB By means of a selective DNA amplification technique called polymerase chain reaction, proviral sequences of the human immunodeficiency virus (HIV-1) were identified directly in DNA isolated from peripheral blood mononuclear cells (PBMCs) of persons seropos. but not in DNA isolated from PBMCs of persons seroneg. for the virus. Primer pairs from multiple regions of the HIV-1 genome were used to achieve max. sensitivity of provirus detection. HIV-1 sequences were detected in 100% of DNA specimens from seropos., homosexual men from whom the virus was isolated by coculture, but in none of the DNA specimens from a control group of seroneg., virus culture-neg. persons. However, HIV-1 sequences were detected in 64% of DNA specimens from seropos., virus culture-neg. homosexual men. This method of DNA amplification made it possible to obtain results within 3 days, whereas virus isolation takes up to 3 to 4 wk. The method may therefore be used to complement or replace virus isolation as a routine means of detg. HIV-1 infection.

IT 113442-16-3  
 RL: ANST (Analytical study)  
 (hybridization probe, in DNA of human immunodeficiency virus detection with polymerase amplification technique)

E1 THROUGH E29 ASSIGNED

FILE 'REGISTRY' ENTERED AT 16:26:53 ON 21 NOV 2000

L7 29 SEA FILE=REGISTRY ABB=ON PLU=ON (287214-94-2/BI OR  
 137368-24-2/BI OR 141442-95-7/BI OR 219125-48-1/BI OR  
 219125-60-7/BI OR 219125-98-1/BI OR 219126-09-7/BI OR  
 219125-56-1/BI OR 219125-70-9/BI OR 219125-77-6/BI OR  
 287214-92-0/BI OR 287214-93-1/BI OR 287741-63-3/BI OR  
 287741-67-7/BI OR 287741-72-4/BI OR 113442-16-3/BI OR  
 Searcher : Shears 308-4994

09/494332

120365-59-5/BI OR 146484-41-5/BI OR 150363-07-8/BI OR  
157607-26-6/BI OR 159609-96-8/BI OR 159610-29-4/BI OR  
168814-33-3/BI OR 186102-76-1/BI OR 214136-59-1/BI OR  
224306-22-3/BI OR 287742-47-6/BI OR 288879-50-5/BI OR  
292665-23-7/BI)

L8 29 L7 AND L5

=> d 1-29 .bevreg1

L8 ANSWER 1 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 292665-23-7 REGISTRY  
CN 15: PN: EP1035220 SEQID: 15 unclaimed DNA (9CI) (CA INDEX NAME)  
CI MAN  
SQL 150

SEQ 1 cgccagcgtg gaccatcaag tagtaatgaa cgcacggacg aggacatcat  
===== ===== ===== ===== =====  
51 agagattaca cctttatcca cagttctcggt tctaacgcag cagtcaagtgt  
===== =====  
101 atcagcacca gcatccgttag tgagtcttca gtgtctgctc caggatcggt  
HITS AT: 1-65

REFERENCE 1: 133:233554

L8 ANSWER 2 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 288879-50-5 REGISTRY  
CN 4: PN: US6107019 SEQID: 4 unclaimed DNA (9CI) (CA INDEX NAME)  
CI MAN  
SQL 33

SEQ 1 cctgttcggg cgccactgct agagatttc cac *Seq 5*  
===== ===== =====  
HITS AT: 3-25

REFERENCE 1: 133:187934

L8 ANSWER 3 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 287742-47-6 REGISTRY  
CN 7: PN: EP1026263 SEQID: 7 unclaimed DNA (9CI) (CA INDEX NAME)  
CI MAN  
SQL 27

SEQ 1 ggggtctgagg gatctctagt taccaga *Seq 4*  
===== ===== =====  
HITS AT: 1-24

REFERENCE 1: 133:160527

Searcher : Shears 308-4994

09/494332

L8 ANSWER 4 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 287741-72-4 REGISTRY  
CN DNA, d(C-C-T-T-C-G-C-G-A-C-C-C-A-A-C-A-C-T-A-C-T-C-G-G-C-T) (9CI)  
(CA INDEX NAME)

OTHER NAMES:

CN 12: PN: EP1026262 SEQID: 12 claimed DNA  
CN 12: PN: EP1035220 SEQID: 12 claimed DNA  
CI MAN  
SQL 27

SEQ 1 cctttcgcga cccaaacacta ctccggct  
===== ===== =====

HITS AT: 1-27

REFERENCE 1: 133:233554

REFERENCE 2: 133:160526

L8 ANSWER 5 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 287741-67-7 REGISTRY  
CN DNA, d(C-G-G-G-G-C-A-C-T-C-G-C-A-A-G-C-A-C-C-C-T-A-T-C-A) (9CI) (CA  
INDEX NAME)

OTHER NAMES:

CN 2: PN: EP1035220 SEQID: 2 claimed DNA  
CN 7: PN: EP1026262 SEQID: 7 claimed DNA  
CI MAN  
SQL 25

SEQ 1 cggggcactc gcaaggcaccc tatca *Sqg. 2*  
===== ===== =====

HITS AT: 1-25

REFERENCE 1: 133:233554

REFERENCE 2: 133:160526

L8 ANSWER 6 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 287741-63-3 REGISTRY  
CN DNA, d(G-G-G-A-G-A-G-C-C-A-T-A-G-T-G-G-T-C-T-G-C-G-G-A-A) (9CI) (CA  
INDEX NAME)

OTHER NAMES:

CN 1: PN: EP1035220 SEQID: 1 claimed DNA  
CN 2: PN: EP1026262 SEQID: 2 claimed DNA  
CI MAN  
SQL 25

SEQ 1 gggagagcca tagtggtctg cgaa  
===== ===== =====

HITS AT: 1-25

Searcher : Shears 308-4994

*Sqg. 1*

REFERENCE 1: 133:233554

REFERENCE 2: 133:160526

L8 ANSWER 7 OF 29 REGISTRY COPYRIGHT 2000 ACS

RN 287214-94-2 REGISTRY

CN 5: PN: EP1026241 SEQID: 5 unclaimed DNA (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 10: PN: EP1026261 SEQID: 1 unclaimed DNA

CN 10: PN: EP1026262 SEQID: 10 unclaimed DNA

CN 5: PN: EP1026263 SEQID: 5 unclaimed DNA

CI MAN

SQL 150

SEQ 1 cgccagcgtg gaccatcaag tagtaatgaa cgcacggacg aggacatcat

===== ===== ===== ===== ===== =====

51 agagattaca cctttatcca cagttctcggt tctaaccgcag cagtcagtgt

===== =====

101 atcagcacca gcatccgttag tgagtcttca gtgtctgctc caggatcgtg

HITS AT: 1-65

REFERENCE 1: 133:248028

REFERENCE 2: 133:160527

REFERENCE 3: 133:160526

REFERENCE 4: 133:160525

REFERENCE 5: 133:145891

L8 ANSWER 8 OF 29 REGISTRY COPYRIGHT 2000 ACS

RN 287214-93-1 REGISTRY

CN 2: PN: EP1026241 SEQID: 2 unclaimed DNA (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 12: PN: EP1026261 SEQID: 3 unclaimed DNA

CN 9: PN: EP1035220 SEQID: 9 claimed DNA

CI MAN

SQL 26

SEQ 1 cacgatcctg gagcagacac tgaaga

===== ===== =====

HITS AT: 1-26

REFERENCE 1: 133:233554

REFERENCE 2: 133:160525

REFERENCE 3: 133:145891

L8 ANSWER 9 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 287214-92-0 REGISTRY  
 CN 1: PN: EP1026241 SEQID: 1 unclaimed DNA (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 11: PN: EP1026261 SEQID: 2 unclaimed DNA  
 CN 8: PN: EP1035220 SEQID: 8 claimed DNA  
 CI MAN  
 SQL 26

SEQ 1 cgccagcgtg gaccatcaag tagtaa  
 =====

HITS AT: 1-26

REFERENCE 1: 133:233554

REFERENCE 2: 133:160525

REFERENCE 3: 133:145891

L8 ANSWER 10 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 224306-22-3 REGISTRY  
 CN DNA, d(C-C-C-C-C-C-C-T-C-C-C-G-G-A-G-A-G-C-C-A-T-A-G-T-G-G-T-C-T-G-C-G-G-A-A-C) (9CI) (CA INDEX NAME)  
 CI MAN  
 SQL 37

SEQ 1 ccccccctcc cgggagagcc atagtggtct gcggAAC *Seq. 1*  
 =====

HITS AT: 12-36

REFERENCE 1: 130:333705 *Seq. 2*

L8 ANSWER 11 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 219126-09-7 REGISTRY  
 CN DNA, d(G-C-G-A-C-T-A-G-G-A-G-A-G-A-T-G-G-G-A-A-C-A-C-A-C-A) (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 10: PN: EP1026263 SEQID: 10 unclaimed DNA  
 CN 7: PN: EP1035220 SEQID: 7 claimed DNA  
 CN 9: PN: EP1026261 SEQID: 12 unclaimed DNA  
 CI MAN  
 SQL 26

SEQ 1 gcgacttagga gagatggaa cacaca *Seq. 7*  
 =====

HITS AT: 1-26

09/494332

REFERENCE 1: 133:233554

REFERENCE 2: 133:160527

REFERENCE 3: 133:160525

REFERENCE 4: 130:91259

L8 ANSWER 12 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 219125-98-1 REGISTRY  
CN DNA, d(G-G-G-A-G-G-T-T-C-T-C-T-C-C-A-G-C-A-C-T-A-G-C-A) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 6: PN: EP1035220 SEQID: 6 claimed DNA  
CN 8: PN: EP1026261 SEQID: 11 unclaimed DNA  
CN 9: PN: EP1026263 SEQID: 9 unclaimed DNA  
CI MAN  
SQL 24

SEQ 1 gggaggttct ctccagcaact agca *Spz 6*  
===== ===== ==

HITS AT: 1-24

REFERENCE 1: 133:233554

REFERENCE 2: 133:160527

REFERENCE 3: 133:160525

REFERENCE 4: 130:91259

L8 ANSWER 13 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 219125-77-6 REGISTRY  
CN DNA, d(G-A-A-C-A-G-A-T-G-G-C-A-C-A-C-T-G-C-T) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 12: PN: EP1026263 SEQID: 12 unclaimed DNA  
CN 15: PN: EP1035220 SEQID: 16 claimed DNA  
CI MAN  
SQL 22

SEQ 1 gaacagatgg gcacacactg ct *Spz 14*  
===== ===== ==

HITS AT: 1-22

REFERENCE 1: 133:233554

REFERENCE 2: 133:160527

Searcher : Shears 308-4994

09/494332

REFERENCE 3: 130:91259

L8 ANSWER 14 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 219125-70-9 REGISTRY  
CN DNA, d(C-A-A-C-A-G-A-C-G-G-C-A-C-A-C-T-A-C-T) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 11: PN: EP1026263 SEQID: 11 unclaimed DNA  
CN 13: PN: EP1035220 SEQID: 13 claimed DNA  
CI MAN  
SQL 22

SEQ 1 caacagacgg gcacacacta ct *Seq. 13*  
===== ===== ==

HITS AT: 1-22

REFERENCE 1: 133:233554

REFERENCE 2: 133:160527

REFERENCE 3: 130:91259

L8 ANSWER 15 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 219125-60-7 REGISTRY  
CN DNA, d(T-G-T-T-C-G-G-C-G-C-C-A-C-T-G-C-T-A-G-A-G-A) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 5: PN: EP1026261 SEQID: 8 unclaimed DNA  
CN 5: PN: EP1035220 SEQID: 5 claimed DNA  
CN 8: PN: EP1026263 SEQID: 8 unclaimed DNA  
CI MAN  
SQL 23

SEQ 1 tgttcggcg ccactgctag aga *Seq. 15*  
===== ===== ==

HITS AT: 1-23

REFERENCE 1: 133:233554

REFERENCE 2: 133:160527

REFERENCE 3: 133:160525

REFERENCE 4: 130:91259

L8 ANSWER 16 OF 29 REGISTRY COPYRIGHT 2000 ACS  
RN 219125-56-1 REGISTRY  
CN DNA, d(G-G-G-T-C-T-G-A-G-G-G-A-T-C-T-C-T-A-G-T-T-A-C-C-A-G-A-G-T) (9CI) (CA INDEX NAME)

Searcher : Shears 308-4994

09/494332

OTHER NAMES:

CN 4: PN: EP1026261 SEQID: 7 unclaimed DNA

CN 4: PN: EP1035220 SEQID: 4 claimed DNA

CI MAN

SQL 29

SEQ 1 gggctctgagg gatctcttagt taccagagt *Seq 4*  
===== ===== =====

HITS AT: 1-24

REFERENCE 1: 133:233554

REFERENCE 2: 133:160525

REFERENCE 3: 130:91259 *scratches*

L8 ANSWER 17 OF 29 REGISTRY COPYRIGHT 2000 ACS

RN 219125-48-1 REGISTRY

CN DNA, d(C-T-G-C-T-T-A-A-G-C-C-T-C-A-A-T-A-A-A-G-C-T-T-G-C-C-T-T-G-A)  
(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3: PN: EP1026261 SEQID: 6 unclaimed DNA

CN 3: PN: EP1035220 SEQID: 3 claimed DNA

CN 6: PN: EP1026263 SEQID: 6 unclaimed DNA

CI MAN

SQL 30

SEQ 1 ctgcttaagc ctcaataaaag cttgccttga *Seq. 3*  
===== ===== =====

HITS AT: 1-30

REFERENCE 1: 133:233554

REFERENCE 2: 133:160527

REFERENCE 3: 133:160525

REFERENCE 4: 130:91259 *scratches*

L8 ANSWER 18 OF 29 REGISTRY COPYRIGHT 2000 ACS

RN 214136-59-1 REGISTRY

CN DNA, d(C-C-T-C-C-C-G-G-G-C-A-C-T-C-G-C-A-A-G-C-A-C-C-C-T-A-T-C-A-G-G-C-A-G-T-A-C-C-A) (9CI) (CA INDEX NAME)

CI MAN

SQL 40

SEQ 1 cctcccgggg cactcgcaag caccctatca ggcagtacca *Seq 11*  
===== ===== =====

HITS AT: 6-30

Searcher : Shears 308-4994

REFERENCE 1: 129:299005

L8 ANSWER 19 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 186102-76-1 REGISTRY  
 CN DNA, d(G-C-C-T-T-T-C-G-C-G-A-C-C-C-A-A-C-A-C-T-A-C-T-C-G-G-C-T)  
 (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(G-C-C-T-T-T-C-G-C-G-A-C-C-C-A-A-C-A-C-T-A-C-T-C-G-G-C-T)  
 CI MAN  
 SQL 28

SEQ 1 gccttcgctg acccaacact actcggtc  
 ===== ===== =====

HITS AT: 2-28

REFERENCE 1: 126:126887

L8 ANSWER 20 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 168814-33-3 REGISTRY  
 CN DNA, d(A-C-A-A-G-G-C-C-T-T-T-C-G-C-G-A-C-C-C-A-A-C-A-C-T-A-C-T-C-G-G-C-T-T-C-G-G-C-T-C-T-G-G-A-C) (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(A-C-A-A-G-G-C-C-T-T-T-C-G-C-G-A-C-C-C-A-A-C-A-C-T-A-C-T-C-G-G-C-T-C-T-G-G-A-C)  
 CI MAN  
 SQL 46

SEQ 1 acaaggcctt tcgcgaccca acactactcg gcttcggctc tggac  
 ===== ===== ===== ==

HITS AT: 7-33

REFERENCE 1: 124:2516

L8 ANSWER 21 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 159610-29-4 REGISTRY  
 CN DNA, d(C-A-C-A-C-A-A-C-A-G-A-C-G-G-C-A-C-A-C-T-A-C-T-T-G)  
 (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(C-A-C-A-C-A-A-C-A-G-A-C-G-G-G-C-A-C-A-C-A-C-T-A-C-T-T-G)  
 CI MAN  
 SQL 28

SEQ 1 cacacaacag acgggcacac actacttg  
 ===== ===== =====

HITS AT: 5-26

REFERENCE 1: 122:2776

L8 ANSWER 22 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 159609-96-8 REGISTRY  
 CN DNA, d(T-C-C-C-T-G-T-T-C-G-G-C-G-C-C-A-C-T-G-C-T-A-G-A-G-A-T)  
 (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(T-C-C-C-T-G-T-T-C-G-G-C-G-C-C-A-C-T-G-C-T-  
 A-G-A-G-A-T)  
 CI MAN  
 SQL 28

SEQ 1 tccctgttcg ggccggactg ctagagat  
 ===== ===== =====

HITS AT: 5-27

Seq 5

REFERENCE 1: 122:2776

L8 ANSWER 23 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 157607-26-6 REGISTRY  
 CN DNA, d(P-thio) (C-G-G-G-C-A-C-T-C-G-C-A-A-G-C-A-C-C-C-T-A-T-C-A-G-G-  
 C) (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(P-thio) (C-G-G-G-C-A-C-T-C-G-C-A-A-G-C-A-C-  
 C-C-T-A-T-C-A-G-G-C)  
 CI MAN  
 SQL 28

SEQ 1 cggggcactc gcaaggcaccc tatcaggc Seq 82  
 ===== ===== =====

HITS AT: 1-25

REFERENCE 1: 121:172241

L8 ANSWER 24 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 150363-07-8 REGISTRY  
 CN DNA, d(A-C-A-A-G-G-C-C-T-T-T-C-G-C-G-A-C-C-C-A-A-C-T-A-C-T-C-G-G-  
 C-T) (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(A-C-A-A-G-G-C-C-T-T-T-C-G-C-G-A-C-C-C-A-A-C-  
 A-C-T-A-C-T-C-G-G-C-T)  
 CI MAN  
 SQL 33

SEQ 1 acaaggcatt tcgcgaccca acactactcg gct  
 ===== ===== =====

HITS AT: 7-33

REFERENCE 1: 120:70883  
 Searcher : Shears 308-4994

L8 ANSWER 25 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 146484-41-5 REGISTRY  
 CN DNA, d(C-C-G-G-A-G-A-G-C-C-A-T-A-G-T-G-G-T-C-T-G-C-G-G-A-A-C-C-G-  
 G) (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(C-C-G-G-A-G-A-G-C-C-A-T-A-G-T-G-G-T-C-T-G-  
 C-G-G-A-A-C-C-G-G)  
 CI MAN  
 SQL 31

SEQ 1 ccgggagagc catagtggtc tgcggAACCG g      *Seq 1*  
 ===== ===== =====  
 HITS AT: 3-27

REFERENCE 1: 118:140789

L8 ANSWER 26 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 141442-95-7 REGISTRY  
 CN DNA, d(T-C-C-C-G-G-G-C-A-C-T-C-G-C-A-A-G-C-A-C-C-C-T-A-T-C-A-G-G)  
 (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(T-C-C-C-G-G-G-C-A-C-T-C-G-C-A-A-G-C-A-C-C-  
 C-T-A-T-C-A-G-G)  
 CI MAN  
 SQL 30

SEQ 1 tcccggggca ctcgcaagca ccctatcagg  
 ===== ===== =====  
 HITS AT: 4-28

REFERENCE 1: 124:195098

REFERENCE 2: 123:219406

REFERENCE 3: 122:231999

REFERENCE 4: 116:229085

L8 ANSWER 27 OF 29 REGISTRY COPYRIGHT 2000 ACS  
 RN 137368-24-2 REGISTRY  
 CN DNA, d(C-C-A-C-G-C-T-T-G-C-T-T-G-C-T-A-A-A-G-A-C-C-T-C) (9CI) (CA  
 INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Deoxyribonucleic acid, d(C-C-A-C-G-C-T-T-G-C-T-T-G-C-T-T-A-A-A-G-A-C-  
 C-T-C)  
 OTHER NAMES:  
 CN 13: PN: EP1026263 SEQID: 13 unclaimed DNA  
 CN 14: PN: EP1035220 SEQID: 14 claimed DNA  
 Searcher : Shears 308-4994

09/494332

CI MAN

SQL 25

SEQ 1 ccacgcttgc ttgcttaaag acctc  
===== ===== ===== Seq 14

HITS AT: 1-25

REFERENCE 1: 133:233554

REFERENCE 2: 133:160527

REFERENCE 3: 130:91259

REFERENCE 4: 115:275250.

L8 ANSWER 28 OF 29 REGISTRY COPYRIGHT 2000 ACS

RN 120365-59-5 REGISTRY

CN DNA, d(T-T-G-A-G-C-C-C-T-G-G-A-G-G-T-T-C-T-C-T-C-C-A-G-C-A-C-T-A-G-C-A-G-G-T-A-G) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Deoxyribonucleic acid, d(T-T-G-A-G-C-C-C-T-G-G-A-G-G-T-T-C-T-C-T-C-C-A-G-C-A-C-T-A-G-C-A-G-G-T-A-G)

CI MAN

SQL 38

SEQ 1 ttgagccctg ggaggttctc tccagcacta gcaggttag  
===== ===== =====

HITS AT: 10-33

REFERENCE 1: 110:188624

L8 ANSWER 29 OF 29 REGISTRY COPYRIGHT 2000 ACS

RN 113442-16-3 REGISTRY

CN DNA, d(A-C-C-A-G-A-G-T-C-A-C-A-C-A-C-A-G-A-C-G-G-C-A-C-A-C-T-A-C-T) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Deoxyribonucleic acid, d(A-C-C-A-G-A-G-T-C-A-C-A-C-A-C-A-G-A-C-G-G-C-A-C-A-C-T-A-C-T)

CI MAN

SQL 34

SEQ 1 accagagtca cacaacagac gggcacacac tact  
===== ===== =====

HITS AT: 13-34

REFERENCE 1: 108:127813

=> fil hom

Searcher : Shears 308-4994

09/494332

FILE 'HOME' ENTERED AT 16:27:49 ON 21 NOV 2000

Searcher : Shears 308-4994